Student Activity 7: Create More Complex Code

You are probably excited about planning more and more complex adventures for Tuff-Bot. As all programmers have learned, when you approach a new project, there are several steps you should take. Following these guidelines will help you be more successful more quickly.

1. Define your project. What is the goal? Exactly what do you want Tuff-Bot to do? Where does it start? Where should it end? What type of route have you designed? You can create another maze or route to follow, or pick a starting and ending point for Tuff-Bot's travels.

2. Plan out the code before you touch Tuff-Bot. Write down the commands you think will work to complete your project successfully. Review them with another team member and see if you agree that it is a good plan.

3. Give Tuff-Bot the commands you expect will work. See if you can complete the task with one set of commands.

4. If Tuff-Bot successfully completes the project, you did a great job! You planned well!

5. If Tuff-Bot did not do what you expected and didn't complete the project successfully, take a close look at what it did do. Where did things go wrong? You need to debug your program. Can you revise your code so that it will work the next time? Try your revised project and see if it works this time.

Does this kind of planning help you complete projects with more success and more quickly?